

## ABSTRACT OF THE DISCLOSURE

High output popular small frame alternators have a high rate of failure due to higher heat temperatures typically caused by; 1) continuous higher rate charging, 2) lack of heat dissipation through rectifier heat sinks and diodes, 3) insufficient cooling (air exchange/air flow) through alternator and components, 4) the “plugging up” of alternator by foreign matter such as chaff, dust etc... as is common in agricultural, mining and industrial applications and therefore limiting cooling and causing “burn out”.

The invention consists of an improved alternator Slip Ring End Housing (SRE) to allow for a larger and improved rectifier with larger heat sinks (and thus its exposed surface area) for increased heat dissipating capability and 9 50amp diodes vs. the original 6 25amp diodes representing a twinning of the positive diodes per phase (and thus increasing its current carrying capability) as well as an improved more open design in the housing and rectifier to allow for more air flow and a cooler running, more durable alternator.